Year 9 Science: Mass number, electron shells and valence electrons

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Aluminium-27 has atomic number 13. How many protons, neutrons and electrons does a neutral atom have?

2. Write the electron arrangement for sulfur, atomic number 16.

3. Potassium has atomic number 19. How many valence electrons does it have, and in which shell?

4. Fluorine is 2,7. Will it tend to lose or gain electrons, and how many?

5. Why is it harder to recycle helium than to recycle copper?

Fix the mistake

6. Correct this statement: "The mass number of chlorine-35 means it has 35 neutrons."

7. Correct this statement: "Potassium is 2,8,9, because the third shell can take more electrons."

8. Correct this statement: "Chlorine is in group 17, so it has 7 electrons."

9. Correct this statement: "Sodium loses an electron, so it becomes a negative ion."